

ALPHABET SOUP



[A Special Edition Featuring Organic Farming Issues]

An EPA Region 4 pesticides information update to inform regulators, organizations, and the interested public about the Food Quality Protection Act (FQPA), sustainable agriculture projects, and FIFRA registration actions and policy. Editor: Lora Lee Schroeder, Life Scientist

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USDA Sponsors “Building Capacity in Organic Agriculture” Workshops in Georgia

Note: The Region 4 Agricultural Initiative Pilot Project is seeking to establish new partnerships with organizations that promote management practices that reduce the risks from pesticides and have been active participants in the organic workshop series.

A series of four workshops sponsored by Georgia Organics, Inc. and funded by the USDA Southern Region Sustainable Agriculture Research and Education Professional Development Program (SARE PDP) has met with an enthusiastic response. Participants have had an opportunity to make on-site visits to organic farms in Georgia and to see first hand the challenges and rewards of organic farming.

The major workshop topics were: Markets and Certification, Building a Healthy Soil, Managing Weeds, Pests and Diseases, and Seeds and Supplies.

WORDS TO LIVE BY

“Crop Residue is a poor man’s education.”

“A field without a cover crop is like a dry cow.”

Cover Crops Provide Big

Benefits: Dr. Sharad Phatak, a professor of horticulture at the University of Georgia’s Coastal Plain Experiment Station at Tifton, spoke of the benefits of cover crops. He explained how a natural mulch can be used to suppress weeds. Other benefits of cover crops are enrichment of the soil and, in some cases, suppression of disease such as with the brassicae (broccoli, cabbage, cauliflower, collards, kale, kohlrabi, mustard greens, rape). Brassica cover crops are reported to work similarly to the fumigant methyl bromide.

Other issues to consider when planting cover crops are keeping the cover crop from being a weed itself. In Georgia Crimson Clover is a good cover crop because it won’t germinate in summer months but reseeds for a winter crop,

eliminating the expense of having to buy more seed. According to Dr. Phatak, managing cover crops at planting in the spring is the key to deriving the maximum benefits. If you bury non-leguminous cover crops like rye with a moldboard plow, it will provide organic matter, improve soil structure, reduce soil compaction and reduce nutrient leaching. Leguminous covers such as clover have the added benefit of fixing nitrogen which will then be available during the spring and summer of the following year. To suppress weeds, he advises leaving residues of cover crops on the surface of the soil by cutting or lightly disking the cover crops.

To maintain habitat for beneficial insects, leave strips of cover crops undisturbed in the field and along its borders. This will provide enough beneficials to control most insects until the end of May to early June.

Soil Quality is Key: Dr. Julia W. Gaskin of the Biological and Agricultural Engineering Department at the University of Georgia Cooperative Extension Service talked about the need to improve

most Georgia soils which are typically very low in organic matter.

The benefits of organic matter are increased cation exchange capacity, increased water holding capacity, improved soil structure, increased infiltration, decreased erosion and increased disease resistance.

Dr. Gaskin demonstrated how to measure soil quality by digging a 12 inch hole to examine for surface crusts, plow pan, roots, smell, earthworms and color. By using a Georgia Soil Quality Card farmers can assess for themselves the soil quality of their fields. A Soil Quality Test Kit can be obtained from USDA Natural Resources Conservation Service offices.

Workshop participants had an opportunity to play in the dirt when they counted earthworms as an indicator of soil health. Ten earthworms per square foot is considered "good." Numbers of earthworms are affected by tillage, temperature, moisture, soil texture, available food and agrichemicals.

Community Supported Agriculture (CSA) Keeps Consumers in Touch with Farmers

Members of CSA's subscribe to a community supported farm and pay a seasonal, monthly, or weekly fee to receive weekly shipments of fresh produce, which varies in content according to the season. This direct connection between farmer and consumer eliminates the extra costs necessitated by a middle person, and it is more secure for farmers because they know they have a reliable buyer.

CSA's generally deliver within 24 hours of picking and most use organic growing methods. CSA's typically supply many different varieties of fruits and vegetables, including hard-to-find

"heirloom" varieties.

Another benefit of CSA is knowing where and by whom your produce is grown. Members are more likely to be accepting of a few blemishes and insect damage when they can visit the garden and see how crops are grown.

Information about CSA's, where they are located and how to get started can be obtained by visiting:

< <http://www.csacenter.org/>>

Post Properties Features Organic Gardening in Upscale Apartment Complex

Jonathan Shipp, Landscape Operations Manager of Post Properties in Atlanta, Georgia says organic garden plots and boxes are a big hit with residents. This is one of the many amenities that is attracting residents to developments such as Post Properties in Atlanta, Georgia.

Post Properties was featured in the October 1999 edition of Southern Living Magazine, in part for their unusual approach to garden plots.

Bacchanalia Restaurant Features Organic Food

A visit to Bacchanalia, a five star restaurant in Atlanta, Georgia, located on Howell Mill Road, was met with much enthusiasm by participants of a workshop designed to build capacity in organic agriculture. Participants feasted on organic pecans, strawberries, arugula, and baby leeks as they were unloaded from the produce truck. Raymond Hook, the produce buyer, seeks out only the freshest and tastiest organic produce. Raymond buys Georgia grown organic produce whenever possible, but there currently is a greater demand than supply.

According to Raymond, "taste" is the

most important quality in organic produce and often what separates it from conventionally grown produce. Because organic growers are generally small and close to their markets, they can grow heirloom varieties of plants which have not lost their flavor in exchange for other characteristics such as long shelf-life.

Visitors to Bacchanalia frequently sing its praises as the best restaurant in Atlanta and possibly the Southeast. You can expect to find dishes such as roasted butternut squash, foie gras with sea scallops, crab fritters with California citrus, avocado and Thai pepper essence. To learn more about Bacchanalia visit:

<wysiwyg://10<http://atlanta.citysearch.com/E/V/ATLGA/0005/95/93/>>

EPA Region 4 Develops Connections with Organic Community

The Mountain Partners in Agriculture Program funded by EPA's Sustainable Development Challenge Grant Program in 1999 is working to help organic farmers in the Western North Carolina area find new markets for their products. (See November 1999 issue of "Alphabet Soup" for details at <http://www.epa.gov/region4/air/pesticides/newslett.htm>)

The Region 4 Strategic Agricultural Initiative grant program solicited proposals from the organic community for possible funding among six other proposals. The deadline for submission was July 31, 2000. Proposals are currently under review and formal announcements of funded proposals are expected in early September.

Staff from the EPA Region 4 Pesticides Section attended a training workshop in Spring of 2000 for agents and educators in Georgia designed to build capacity in organic agriculture. The series of four training session was funded by the USDA Southern Region Sustainable Agriculture Research and Education Professional Development Program (SARE PDP). The workshop will be repeated in South Georgia in 2001.

Food for Thought

What is Organic Certification?

“Organic certification is a guarantee to the consumer that a particular foodstuff has been procured and/or processed according to certain standards designed to ensure and document that the product has remained uncontaminated and unmixed with non-organic product, from field to market.”

(Quote from Home Page Appropriate technology Transfer for Rural Areas

<[http://www.attra.org/attra-pub/orgcert.html#WHAT IS ORGANIC CERTIFICATION](http://www.attra.org/attra-pub/orgcert.html#WHAT_IS_ORGANIC_CERTIFICATION)>

USDA National Organic Program Revised Proposed Rule

Crop Standards:

- Land would have no prohibited substances applied to it for at least 4 years before the harvest of an organic crop.
- Crop rotation would be implemented.
- The use of genetic engineering, irradiation and sewage sludge is prohibited.
- Soil fertility and crop

nutrients would be managed through tillage and cultivation practices, supplemented with animal and crop waste materials and allowed synthetic materials.

- Preference would be given to the use of organic seeds and other planting stock, but a farmer could use non-organic seed and planting stock under certain specified conditions.
- Crop pests, weeds, and diseases would be controlled primarily through management practices including physical, mechanical and biological controls. When these practices are not sufficient, a biological, botanical, or allowed synthetic substance may be used.
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(Note: Information excerpted from U.S.D.A. Fact Sheets at:

<http://www.ams.usda.gov/nop/facts/>

ORGANIC TIDBITS

A U.S. Department of Agriculture study reports that more than 5,000 U.S. farmers are using organic production methods. By 2000, the Organic Trade Association predicts 10 percent of the U.S. food supply will be grown using organic methods.

The leading reason consumers do not purchase organics is price and/or overall value of the produce, according to *Fresh Trends* 2000 research.

Regionally preferences to buy

organic produce are strongest in the West (22 percent) and the North Central states (20 Percent). The South (18 percent) and the Northeast (15 percent) follow.

Forty eight percent of respondents to the *Fresh Trends* survey saw no difference between the safety of the produce grown organically versus conventional methods.

EPA HEADQUARTERS ENVIRONMENTAL STEWARDSHIP PESTICIDE (PESP) UPDATE

Collaboration is the Name of the Game for Successful PESP Partners. A recent EPA review of strategies submitted by the more than 130 Partners and Supporters that make up the Pesticide Environmental Stewardship Program (PESP) reveals that the most successful strategies involve collaboration among grower's groups, IPM researchers, extension faculty, agribusiness companies and a diverse clientele.

The role that collaborative efforts play in crafting a winning IPM strategy and, ultimately, ensuring successful IPM implementation is demonstrated in many PESP members' strategies that EPA considers among the best submitted in FY 1999.

The importance of extending the partnership concept from PESP members to their stakeholders is perhaps no where better exemplified than in the strategy developed by the **Georgia Peach Council (GPC)**. EPA is touting this as a model strategy and among the best developed by the 35 PESP members involved with minor crops.

Examples of GPC's more "fruitful" collaborative efforts include:

- o Partnering with the **University of Georgia** to provide in-state extension leadership for multi-state agent training in the use of a newly available peach bacterial spot model. The model was developed by another GPC partner, **Clemson University**, to measure local meteorological conditions as a way of predicting when bacterial spot infections will occur, thus affording as-needed precision to pesticide application.
- o Conducting a step-wise examination of microbial and pesticide levels on commercial fruit from picking through the wholesale peach packing process. Microbial data from this project will be used by the industry to develop Hazard Analysis Critical Control Point Systems. The benefits of this research will extend to **USDA, EPA and FDA** by providing a variety of federal purposes including FDA's efforts to strengthen microbial food standards in the fresh produce industry.
- o Coordinating efforts of the **University of Georgia** and **University of Arkansas** and securing **USDA** funding for a major revision of the Georgia Peach Growers' Handbook to provide a badly needed, current commercial IPM compendium.
- o Coordinating the efforts of researchers from the **University of Georgia, USDA's Agricultural Research Service** and the **3-M Corporation** to examine the potential of a new sprayable pheromone mating disruption product that may offer growers the first IPM compatible alternative to chlorpyrifos.

Congratulations to the Georgia Peach

Council for an effective and meaningful strategy to reduce risks from the use of pesticides on peaches grown in the Southeast!

EPA HEADQUARTERS:

Methyl and Methyl Parathion Agreements Continue

EPA's implementation of the August 1999 risk reduction agreements with registrants for azinphos methyl and methyl parathion has continued. The most recent actions are publication in the Federal Register of proposed changes to tolerances for these chemicals. Azinphos methyl notices were published on April 19, 2000 (proposed tolerance changes) and June 22, 2000 (final rule).

Methyl parathion notice proposing tolerance changes was published on June 2, 2000. In addition, EPA is working with the Food and Drug Administration on that agency's plans for implementing the FQPA channels of trade provisions related to methyl parathion. That proposal also appeared in the Federal Register on June 2.

The background information on these agreements can be found on the OPP web site at:

(<http://www.epa.gov/pesticide/citizens/mpfactsheet.htm> and <http://www.epa.gov/pesticides/citizens/azmfactsheet.htm> .

EPA Proposes New Disposal Instructions for Residential Pesticide Product Labels

On June 14, 2000, EPA proposed new disposal instructions for the labels of pesticide products that are used in the home or garden.

Current labels instruct residents to "Securely wrap original container in several layers of newspaper and discard in trash." Some disinfectant products were allowed to instruct consumers to "pour down the drain with plenty of water."

EPA has discovered that the existing instructions may conflict with the laws, regulations, or practices, of some states and localities which instruct consumers to direct these materials away from landfills and give them to their local household hazardous waste management facilities or programs. The proposed changes address this conflict and help promote more careful disposal of products that can be toxic when released in the environment.

The full PR-Notice and instructions for submitting comments are available on EPA's web site at:

www.epa.gov/PR_Notices

EPA Announces Plan to Cancel Most Residential Uses of Chlorpyrifos

Many uses of the popular pesticide chlorpyrifos, one of the most widely-used insecticides in the U.S., both in agriculture and in and around the home, are being canceled or amended

The voluntary agreement reached with registrants will cancel and phase out nearly all indoor and outdoor residential uses. The uses that pose the most immediate risk to children will be canceled first. These uses include home lawn, indoor treatments to control insects such as roaches, and whole house treatments for preventing and controlling termites.

Registrants have also agreed to cancel some food uses posing the greatest risk to children. The agreement cancels post-bloom application on apples, cancels the use on tomatoes, and restricts use on grapes in the U.S. to only dormant applications. These actions will reduce acute dietary risk by 75 percent, effectively eliminating dietary risk concerns for children and others.

Homeowners will be allowed to continue using chlorpyrifos **in their possession**, carefully following label directions. Limited short-term exposure to chlorpyrifos is not expected to significantly increase risks to children over their life-time and use to completion is often the only affordable means of disposal in many areas.

Homeowners who choose not to use chlorpyrifos products in their possession should contact State Environmental Protection Agencies for information about household hazardous waste disposal days which may be available in their community.

Public Health Uses of Chlorpyrifos are Retained for control of fire ant mounds and low volume sprays for mosquitoes by professionals. These application do not pose risks of concern and provide important health benefits.

For additional information on the chlorpyrifos agreement visit the EPA web site at:

[<www.epa.gov/pesticides>](http://www.epa.gov/pesticides)

ORGANIC INFORMATION WEB SITES:

Appropriate Technology for Rural Agriculture. Links to state sites and organic certification programs/information.

[<http://www.attra.org/attra-pub/orgcert.html#WHAT IS ORGANIC CERTIFICATION>](http://www.attra.org/attra-pub/orgcert.html#WHAT_IS_ORGANIC_CERTIFICATION)

Alternative Farming Systems. A topic oriented site from the National Agriculture Library.

[<http://www.nal.usda.gov/afsic/afslinks.htm>](http://www.nal.usda.gov/afsic/afslinks.htm)

Note: Web sites listed do not constitute an endorsement by the U.S. EPA. These sites are listed for your information and convenience.

COMMENTS BY THE EDITOR

Note: The February edition of "Alphabet Soup" was one of the five to ten top downloaded documents for the period of March to May from the Region 4 Air Division Web Page.

To view an electronic version of *Alphabet Soup* visit the Region 4 web site at:
<http://www.epa.gov/region4/air/pesticides/newslett.htm>

Readers are encouraged to submit comments and suggestions for improving the newsletter. To submit comments or information for *Alphabet Soup* please contact:

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